ABSTRACT

A wavelength selective manipulation device and method including: at least a first optical input port for inputting an optical signal including a plurality of wavelength channels; a first wavelength dispersing element for angularly dispersing the wavelength channels of the optical signal into angularly dispersed wavelength signals; an optical power element for focusing in the angularly dispersed dimension the angularly dispersed wavelength signals into a series of elongated spatially separated wavelengths bands; a spatial manipulation element for selectively manipulating the spatial characteristics of the spatially separated wavelength bands to produce spatially manipulated wavelength bands.